



# Collecting Activity Data for Emission Modeling in the State of Mississippi

Mary Evelyn Barnes, B.S.Ch.E., M.S.  
MS Dept. of Envr. Quality

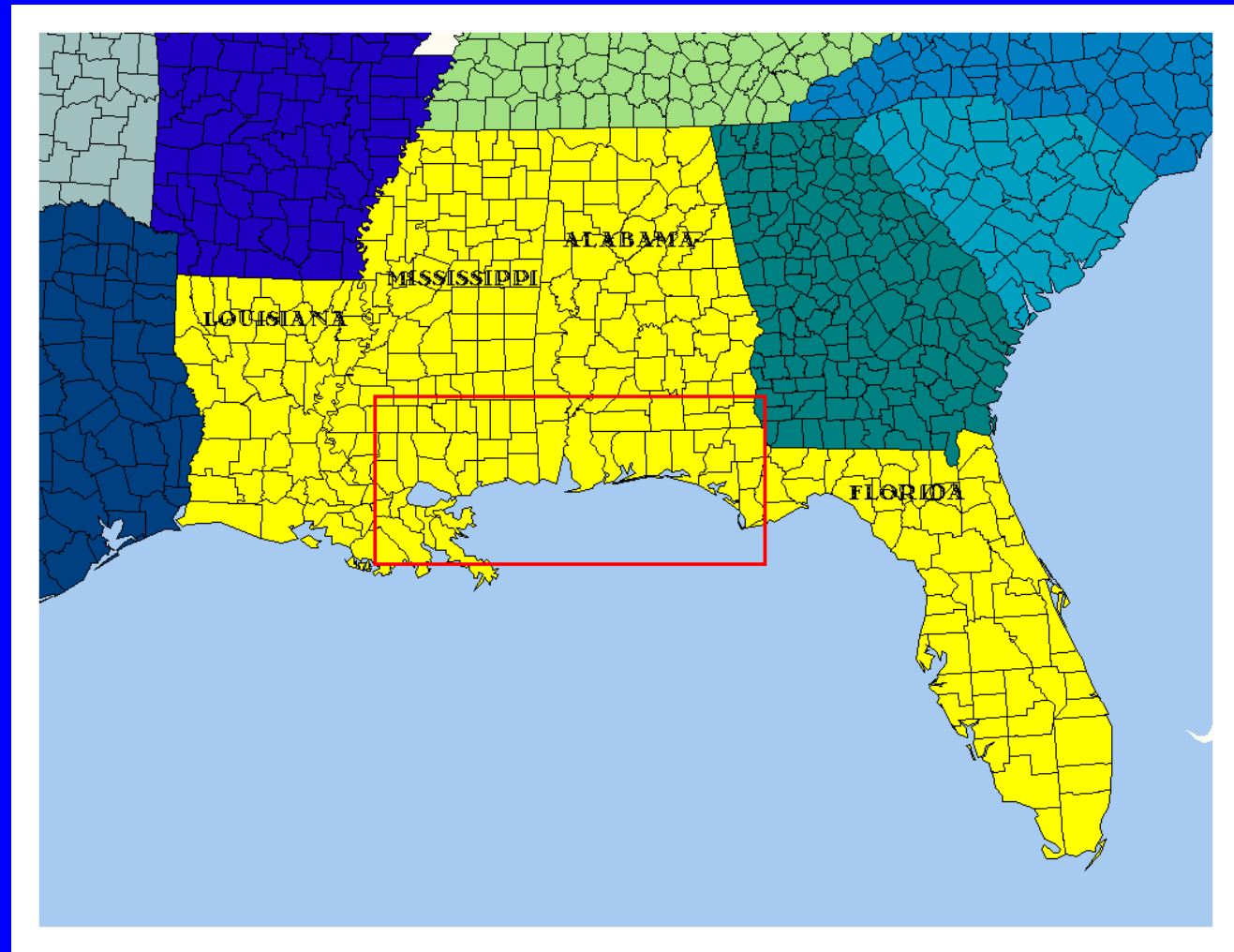
# Introduction to MS Data Collection Process

- This presentation should help NOVICE users
- Mississippi's need for modeling
- How to obtain early “victories” in your quest for data
- Problematic data sources
- Use of contractual work for data processing

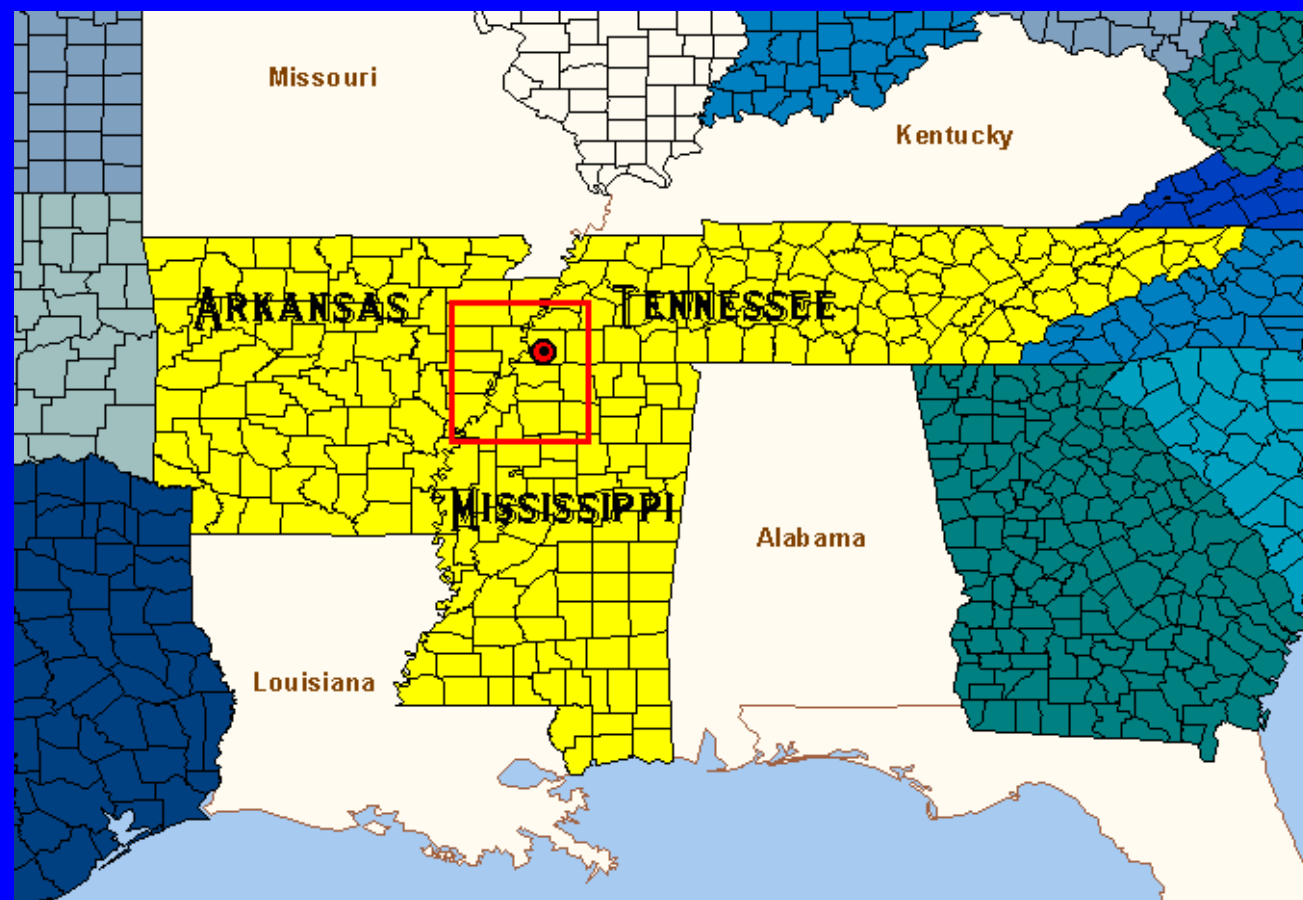
# Mississippi's Need for Modeling

- Involved with Ozone Transport Assessment Group (OTAG) study
- Two (2) current ozone studies in areas of concern

# Gulf Coast Ozone Study (GCOS)



# Arkansas-Tennessee-Mississippi Ozone Study (ATMOS)



Area of Interest for MS is the Memphis, TN MSA

# **Keys to Early “Victories” for Data Collection**

- **Use the “Emission Inventory Review Guidelines” from EPA- should be released summer 2001- Bob McConnell, EPA, Region I**
- **The Guidelines provide data sources and acceptable emission methodology**

# Keys to Early “Victories” for Data Collection (2)

- **DOCUMENT, DOCUMENT, DOCUMENT!**
- **Staff member(s) in charge of the data acquisition should be ORGANIZED-maintain accurate records**
- **Keep phone conversation records- Will you remember a name and phone # three (3) years from now?**

# Keys to Early “Victories” for Data Collection (3)

- After you find the data, ask for **ELECTRONIC** copies
- Make sure to clarify the units on the data (for instance, GTM, gallons of fuel used, etc.)
- Obtain county-level data (not state-level)- the state-level data must be delineated to the county-level by some means



# Data Processing

- *If there aren't ELECTRONIC copies, request hard copies*
- Data entry for hard copies is time-consuming- may want to hire a contractual/student worker for the data entry
- QA/QC data after data entry

# Problem Data Sources for MS



- **Area Source-Commercial Marine Vessels**
- **May use the Waterborne Commerce CD-ROM from the U.S. Army Corps of Engr.**
- **Different states have called us about this**

# Problem Data Sources for MS(2)



- **Non-Road Mobile Source- Rail traffic**
- **We have obtained some rail info from the Surface Transportation Board- not delineated to the county-level**
- **Some data is “proprietary”**

# Problem Data Sources for MS(3)

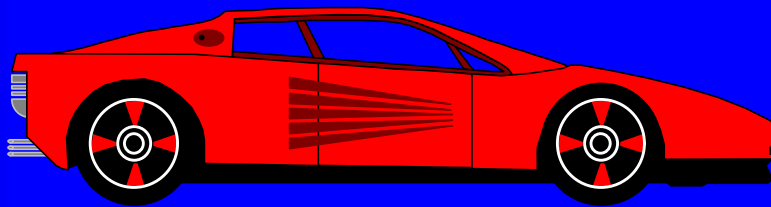


- **Area Source- Wild/Forest Fires**
- **We acquired data from the MS Forestry Commission for location**

# U. S. Census Data

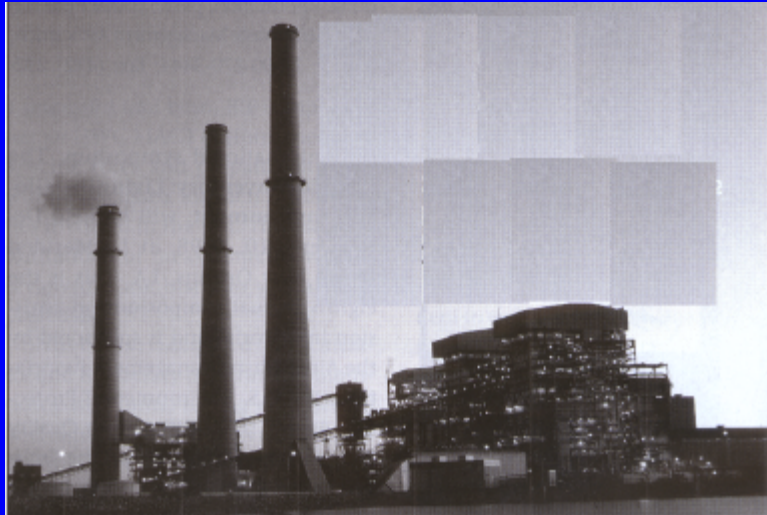
- **Critical factor for emission calculations - especially when using surrogate factors**
- **It has been updated and will be available for use soon**

# Mobile Source Emissions



- This represents a significant portion of emissions in the state of MS
- MOBILE-6 should be released sometime soon (this summer?)- use VMT data

# Point Source Emissions



- “In-house” Title-V permitting info- Power Plants will be significant emission sources
- Good news-you should already have this in a dB somewhere

# Conclusions

- Plan on having a full-time employee to do activity data acquisition-this is a time-consuming process
- Focus on early “victories” like on-road mobile source emissions to keep your momentum rolling
- After you have “finished” collecting data, document the final data sources for the next round



# Contact Information

- **Mary Evelyn Barnes, Air Division**
- **(601) 961-5745**
- **Mary\_Barnes@deq.state.ms.us**
  
- **Elliott Bickerstaff, Air Division**
- **(601) 961-5176**
- **ebickers@deq.state.ms.us**